**PRACTICAL NO: 8B**

**Aim:** Create an android app that demonstrate Internal Storage.

Code:

Activity\_main.xml:

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:id="@+id/textView2"

android:layout\_width="337dp"

android:layout\_height="28dp"

android:text=" File Content "

android:textAlignment="center"

android:textColor="#000"

android:textSize="24sp"

android:textStyle="bold"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintLeft\_toLeftOf="parent"

app:layout\_constraintRight\_toRightOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.52" />

<Button

android:id="@+id/write\_button"

android:layout\_width="wrap\_content"

android:layout\_height="48dp"

android:layout\_marginStart="160dp"

android:layout\_marginEnd="159dp"

android:layout\_marginBottom="16dp"

android:text="Write"

app:layout\_constraintBottom\_toTopOf="@+id/read\_button"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.904" />

<Button

android:id="@+id/read\_button"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_marginStart="160dp"

android:layout\_marginEnd="158dp"

android:layout\_marginBottom="48dp"

android:text="Read"

app:layout\_constraintBottom\_toTopOf="@+id/textView2"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.0"

app:layout\_constraintStart\_toStartOf="parent" />

<EditText

android:id="@+id/userInput"

android:layout\_width="319dp"

android:layout\_height="50dp"

android:layout\_marginStart="46dp"

android:layout\_marginTop="91dp"

android:layout\_marginEnd="46dp"

android:ems="10"

android:inputType="textPersonName"

android:text="Name"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<TextView

android:id="@+id/content"

android:layout\_width="332dp"

android:layout\_height="306dp"

android:layout\_marginStart="33dp"

android:layout\_marginTop="21dp"

android:layout\_marginEnd="33dp"

android:layout\_marginBottom="6dp"

android:text=""

android:textAlignment="center"

android:textColor="#000"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.461"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toBottomOf="@+id/textView2"

app:layout\_constraintVertical\_bias="0.0"/>

</androidx.constraintlayout.widget.ConstraintLayout>

MainActivity.java:

package com.example.practical08b;

import android.content.Context;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.TextView;

import android.widget.Toast;

import androidx.appcompat.app.AppCompatActivity; import java.io.FileInputStream;

import java.io.FileOutputStream;

import java.io.IOException;

public class MainActivity extends AppCompatActivity implements View.OnClickListener {

Button read, write;

EditText userInput;

TextView fileContent;

private String filename = "demoFile.txt";

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

read = findViewById(R.id.read\_button); write = findViewById(R.id.write\_button); userInput = findViewById(R.id.userInput); fileContent = findViewById(R.id.content);

read.setOnClickListener(this); write.setOnClickListener(this); }

public void printMessage(String m) {

Toast.makeText(this, m,

Toast.LENGTH\_LONG).show();

}

@Override

public void onClick(View view) {

Button b = (Button) view;

String b\_text = b.getText().toString();

switch (b\_text.toLowerCase()) { case "write": {

writeData();

break;

}

case "read": {

readData();

break;

}

}

}

private void writeData() {

try {

FileOutputStream fos =

openFileOutput(filename, Context.MODE\_PRIVATE); String data =

userInput.getText().toString();

fos.write(data.getBytes()); fos.flush();

fos.close();

} catch (IOException e) {

e.printStackTrace();

}

userInput.setText("");

printMessage("writing to file " + filename + "completed...");

}

private void readData() {

try {

FileInputStream fin =

openFileInput(filename);

int a;

StringBuilder temp = new

StringBuilder();

while ((a = fin.read()) != -1) { temp.append((char) a);

}

} catch (IOException e) {

e.printStackTrace();

}

printMessage("reading to file " + filename + " completed..");

}

}

Output:



 

